

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently amended) A method, comprising:
 ~~at least partially dicing~~ cutting and severing a semiconductor wafer into a plurality of portions, having a low-K interlayer dielectric (ILD) layer the cutting and severing being performed in a manner that allows the portions to remain disposed with each other as if the semiconductor wafer had not been cut;
 applying a tape to a front side of the ~~partially diced~~ as if uncut semiconductor wafer; and
 grinding a backside of the taped ~~partially diced~~ as if uncut semiconductor wafer.
2. (Currently amended) The method of claim 1 wherein ~~at least partially dicing~~ said cutting and severing of the semiconductor wafer includes:
 laser scribing the semiconductor wafer; and
 dicing the semiconductor wafer into a plurality of dice, the dicing being performed in a manner that allows the dice to remain proximally disposed with each other as if the semiconductor wafer had not been diced.
3. (Currently amended) The method of claim 2 wherein said laser scribing of the semiconductor wafer includes forming at least one trench along streets of the semiconductor wafer separating adjacent semiconductor devices of the semiconductor wafer.
4. (Currently amended) The method of claim 1, further comprising:
 mounting the taped ~~partially diced~~ as if uncut semiconductor wafer having its backside grinded; and
 removing the tape from the front side of the taped ~~partially diced~~ as if uncut semiconductor wafer.

5. (Currently amended) The method of claim 1, further comprising:
attaching an adhesive to the backside of the semiconductor wafer prior to cutting and severing the semiconductor wafer; and wherein ~~at least partially dicing~~ said cutting and severing of the semiconductor wafer includes:
scribing lines along streets on the front side of the semiconductor wafer; and
cutting and severing the semiconductor wafer along the streets of the semiconductor wafer with the scribed lines.
6. (Currently amended) The method of claim 5, further comprising:
cutting the tape and the adhesive attached to the backside of the as if uncut semiconductor wafer to substantially define a perimeter of the as if uncut semiconductor wafer; and
removing the adhesive from the backside of the ~~partially diced~~ as if uncut semiconductor wafer.
7. (Currently amended) The method of claim 5, further comprising:
mounting the taped ~~partially diced~~ as if uncut semiconductor wafer having its backside grinded; and
detaping the tape from the front side of the ~~partially diced~~ as if uncut semiconductor wafer.
8. (Currently amended) A method of thinning a semiconductor wafer, the method comprising:
attaching an adhesive to a backside of the semiconductor wafer;
scribing lines along streets separating integrated circuit devices along a front side of the semiconductor wafer;
cutting the semiconductor wafer along the streets of the semiconductor wafer with the scribed lines to cut and sever the semiconductor wafer into a plurality of portions, with the portions remaining proximally disposed to each other and held in place by the adhesive as if the semiconductor device had not been cut;

applying a protective layer onto at least a portion of the front side of the as if uncut semiconductor wafer;

cutting the protective layer and the adhesive attached to the backside of the as if uncut semiconductor wafer to define a perimeter of the as if uncut semiconductor wafer;
and

grinding the backside of the as if uncut semiconductor wafer to reduce a thickness of the as if uncut semiconductor wafer.

9. (Original) The method of claim 8 wherein the semiconductor wafer includes an interlayer dielectric (ILD) layer having a low dielectric constant (K).

10. (Currently amended) The method of claim 9 wherein said scribing of lines along the streets includes laser scribing through the ILD layer having a low dielectric constant (K).

11. (Currently amended) The method of claim 8 wherein said scribing of lines along the streets includes scribing two lines substantially along either side of each street.

12. (Currently amended) The method of claim 8 wherein said applying of the protective layer includes applying a protective coating.

13. (Original) The method of claim 8, further comprising removing the protective layer.

14. (Original) The method of claim 8 further comprising, removing the adhesive cut to define the perimeter of the semiconductor wafer.

15. (Original) The method of claim 8, wherein the protective layer includes a backgrind tape.

16. (Currently amended) The method of claim 8, further comprising:
mounting the as if uncut semiconductor wafer having its backside grinded; and

removing the protective layer from the front side of the as if uncut semiconductor wafer.

17. (Currently amended) A method, comprising:

~~a least partially dicing a semiconductor wafer into a plurality of dice, the dicing being performed in a manner that allows the dice to remain proximally disposed to each other as if having a low-K interlayer dielectric (ILD) layer to form a plurality of cuts in the semiconductor wafer had not been diced;~~

taping a first side of the as if undiced semiconductor wafer ~~across at least some of the cuts~~; and

grinding a second side of the as if undiced semiconductor wafer.

18. (Currently amended) The method of claim 17 wherein ~~at least partially the semiconductor device includes a low-K interlayer dielectric (ILD) layer, and said dicing of the semiconductor wafer to form the plurality of cuts includes:~~

laser scribing through the low-K ILD layer to form trenches in the low-K ILD layer;
and

sawing the semiconductor wafer along the formed trenches to singulate semiconductor devices of the semiconductor wafer.

19. (Currently amended) The method of claim 18, wherein said laser scribing through the low-K ILD layer includes scribing two lines along streets separating adjacent ones of the semiconductor devices.

20. (Currently amended) The method of claim 17, further comprising mounting the semiconductor wafer before ~~at least partially dicing the semiconductor wafer~~.

21. (Currently amended) The method of claim 20 further comprising:

cutting a tape applied to the first side of the ~~partially-diced~~ as if undiced semiconductor wafer ~~across at least some of the cuts to approximate the semiconductor wafer shape~~; and

removing an adhesive used to mount the as if undiced semiconductor wafer.

22. (Currently amended) The method of claim 21, further comprising, cutting the adhesive used to mount the as if undiced semiconductor wafer to approximate a shape of the as if undiced semiconductor wafer ~~shape~~ before removing the adhesive.

23. (Original) The method of claim 21 wherein the adhesive is a mounting tape.

24. (Currently amended) The method of claim 17, further comprising mounting the ~~partially diced~~ as if undiced semiconductor wafer having its second side grinded onto a wafer frame.

25. (Currently amended) The method of claim 24, further comprising removing a tape applied to the first side of the ~~partially diced~~ as if undiced semiconductor wafer ~~across at least some of the cuts~~.

26. (Cancelled)

27. (Cancelled)